Fashioning knowledge into a potent weapon

By Emmitt Richardson, Jr.

Introduction

I am a member of a team of knowledge management integrators contracted to provide dedicated service to seven brigade combat teams assigned to Regional Command (East) in Afghanistan. KM personnel have a myriad of backgrounds and experiences. My perspective is based upon 23 years experience in information technology.

Summary

KM in brigade and below units is relatively uncharted area, due to the lack of an authorized KM Section. As with any new capability, putting it in the right place at the right time in their Army Force Generation cycle fully enables a KMI's impact. KM needs to be incorporated into a unit just as all weapons systems are integrated, with training, familiarization, and tactics, techniques, and procedures. The preferred practice is to integrate KM prior to deployment for the unit to fully exploit the potential of KM integration into the unit's processes and support to the commander. Finally, KM works closely with IT, IMO and the staff to incorporate standardized processes, with the end state being better, more informed decision-making by the command.

Weaponization of KM

During Operation Enduring Freedom XI, in June 2010, seven brigades in RC(E) were outfitted with KMI.

Since brigades do not normally have dedicated KM support personnel at their level, having KM expertise was a new experience for the brigade.

KM for the brigade requires an introduction of its capabilities and limitations, training, and incorporation into the unit, just as a new weapon system would be integrated. The challenge of this introduction is especially true when it is coupled with the brigade's high operational tempo in support of combat operations at the tactical level.

As a KM integrator in a combat brigade, there was a need to coach and mentor staff in the understanding of KM philosophy and services. When introduced to staff as the brigade knowledge manager, it became evident that many never heard of a KM or understood how knowledge can be managed.

To facilitate the introduction to KM, a KM presentation along with a complete website that gives pertinent information and tools needed to teach KM processes and concepts was developed. But that was not enough; a training program was needed, thus the development of the KM working group (KMWG). To help bring KM directly to a staff section, staff KM representatives were asked to participate in the working group to determine and discuss specific section needs; to help other sections learn; and to give the KM practitioners the opportunity to discuss critical information that needed to be shared.

Since many staff members are not accustomed to KM, it makes sense to conduct WGs that can be facilitated by a single representative instead of training the entire staff, which have other functions to perform.

Development of the KMWG was critical to understand staff section needs and to facilitate a single point of contact per section. KMRs participate in the KMWG, bringing questions, projects, concepts, and concerns to the meetings that are addressed among the entire group, not just the KMI. Sections provided a representative that was the "best fit" for the position and not based on rank or primary duty position. The KMR took the feedback and outcomes from the KMWG to their sections for implementation.

The KM program attempts to standardize daily processes , such as managing document libraries, synchronizing the battle rhythm, file naming conventions, managing personally identifiable information, sharing the common operating picture, and cross network domain transfers, to name but a few. During my tenure, staff sections and the command used KM to streamline and improve processes.

Bringing KM to the unit during combat is problematic and needs to be corrected. When the decision was made to bring a KM integrator to the brigade level, the unit was already deployed and established in OEF with their mission already underway. At this point, the unit has an established battle rhythm based on how they perform in garrison, pre- deployment exercises, and concepts inherited from the previous unit that occupied the same battle space. Introducing a KM integrator after a unit is established is challenging.

Recommendation

Changing established practices of the command and staff to something new, something unfamiliar, and something untested within the organization is difficult in any situation, but even more so when the unit is engaged in warfighting. It's best to introduce a KM integrator during the unit's training phase where newly incorporated changes carry less risk. The KM integrator would theoretically stay with the unit during deployment, to optimize current processes and serve as a member of the team to address new challenges discovered while in combat.

Defining BCT KM Relationships

KM sections are normally authorized at the division echelon and above. The KM Section is typically manned by military officers and non-commissioned officers that run the program as well as web developers and server administrators. During CJTF-101's deployment as the RC (E) headquarters in Afghanistan, the CJTF KM section contracted KM personnel for U.S. BCTs, and these personnel held the title of KM Integrators (KMI). The KMI's function is to bring KM to the brigade, supporting processes and standards in collaborative communication and explicit data management. At my current brigade, there are no officers, non-commissioned officers or technical experts authorized for a KM section, requiring the KMI to provide

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more services and guidance to the command.

At the brigade level and lower, KM functions are often assigned as an additional duty, usually to the staff Signal officer, S6. At my current combat brigade, the S6 is considered synonymous with KM because of the information technology tools the two sections use.

The staff believes that KM serves under the S6 because of how the dedicated KMI is integrated. Why? Because a myriad of perceptions remain unchanged. One perception is that the primary collaboration tool at the combat brigade is Microsoft Office SharePoint Server also known as MOSS or the portal, which is technology based hardware and software, and therefore a function of the S6.

Since S6 installs the portal, users believe services and functionality are handled by the S6 and not the KM, another perception which set the S6 to serve as the KMO, before a dedicated KM practitioner was contracted. Lastly the placement of the KM cell/work area within the office of the S6 Information Management section implies the KM Section works for the S6. The combination of these perceptions leads the casual observer to infer that KM works for the S6, or the S6 is responsible for KM at the BCT.

To successfully bring KM to the brigade requires understanding the needs of the staff, the dynamics of diverse staff members not familiar KM processes. The development of a close relationship with the brigade information management and staff signal officer can assist in implementing changes and improvements to staff operations.

Upon arrival, a KMI must determine the pulse of the organization. This includes determining the commander's expectations, an analysis of what KM can provide to the unit, and defining the Knowledge Services that can be provided to the organization. Knowledge services are the training, collaboration tools, concepts and processes the unit can use to enhance its operations.

As defined in AR 25-1, IM is the planning, budgeting, manipulating and controlling of information throughout its life cycle. IMO is defined as the office/individual responsible to the respective commander/director/chief for coordinating service definition, management oversight, advice, planning, and funding coordination of all IT/IM requirements (business and mission) for the organization.

The IMO assists the commander/director/chief in exercising responsibility to effectively manage the organization's IT/IM processes and resources that enable the organization's business and mission processes. Typically the IMO function resides in the S6 office and is performed by the S6 Signal officer, with support from the S6 FA53 information systems manager, and the S6 chief warrant officer 254A Signal systems support technician. In a BCT, the IM responsibility is not directly assigned to a section; rather the Staff Sections must manage their respective information with assistance from the S6 (ISM) and the KMO.

As it relates to the IMO and IM, the KMO advises the organization on KM processes that take advantage of existing IT infrastructure, software, and systems supported by the S6 Office. However, KM processes should endeavor to take advantage of unit resources (materiel and skills), unless additional means are needed to answer the commander's information and knowledge sharing requirements. Additional technical assistance or IT may be required, dependent upon the S6 Section's skill set, software and equipment inventory.

The IMO position requires many hours of certified training and experience in technical skills to include routing, information assurance, networking, hardware and software installation, and security protocols. Knowledge management is more involved with assessing the needs of the organization through process review, and recommending solutions that include potential changes to people, process, technology, or culture. To know the unit's people and understand their needs is paramount in knowledge management.
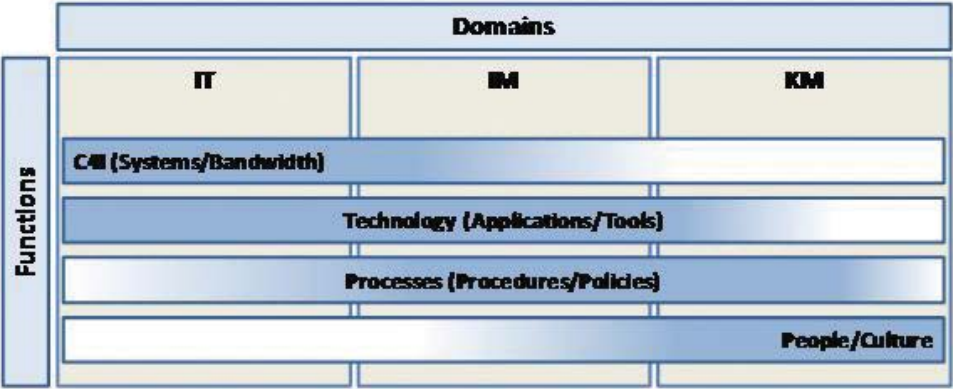
Recognizing processes and technology that promote knowledge flow are also prerequisites for being a good KMO. Based on previous experience, there is no requirement for a KMO to have a proficiency in IM; however significant advantages exist when the KMO knows and understands information systems and information management. Depending upon organizational needs, the KMO may be expected to have IM skills that go beyond normal KM requirements. Those skills might include web page design, server administration, computer language, and database management. Though a KM integrator may have IT certifications or experience and skilled enough to work in an IT section or on specific IT systems, organizations should avoid assigning them to the S6 section, for as discussed above, they

Figure 1

The KMO – IM – IMO Relationship

While an overlapping relationship exists between KM, information management and the information management office, I believe a definitive break exists between these functions based off of my experiences.

frequently lose the ability to develop a broad understanding of unit needs. The S6 Officer in a brigade reports to the executive officer for daily operational guidance and the KM Officer should do the same. However, because of the idea that KM is associated with IM, the KMO often reports to the S6 Officer. This relationship tends to reinforce the misunderstanding that KM solutions are almost always related to a technological solution. Often the solution focuses on the people, process or culture change, with technology holding a supporting role. But when the KMO works for the executive officer, they inherit greater flexibility to support all staff sections without the expectation of providing only technological solutions.

To recap the KM – IMO – IM relationship, the IMO ensures the installation and security of IT equipment and networks plus performs monitoring and maintenance. IM in the BCT is a shared responsibility across all staff functions with technical assistance from the S6 and best sharing practices from the KMO. The Knowledge Management office assists the command in developing and executing a knowledge management program based on the commander's priorities.

Emmitt Richardson, Jr., knowledge management officer, shares information with others in his unit during operations in Afghanistan.

Mr. Emmitt Richardson, Jr. served as the knowledge manager for a forward deployed combat brigade task force in Regional Command (East) (RC (E)), Afghanistan, from June 2010 – June 2011. As a retired Army Signal first sergeant, his expertise consists of 23 years in information management specialties. Mr. Richardson holds a Bachelor of business management degree and a Master of information systems degree from the University of Phoenix.

ACRONYM QuickScan

AAR – After Action Review
ABCS – Army Battle Command System
AKMQC – Army Knowledge Management Qualification Course
AMN – Afghanistan Mission Network
ARFORGEN – Army Force Generation
BCT – Brigade Combat Team
BP – Best Practices
C4I – Command, Control, Communications, Computers and Intelligence
CALL – Center for Army Lessons Learned
CENTRIX-ISAF – Combined Enterprise Regional Information Exchange - International Security Assistance Forces
CIO – Chief Information Officer
CJ – Combined Joint
CKM – Certified Knowledge Manager
CKO – Chief Knowledge Officer
CJTF - Combined Joint Task Force
CM – Content Management
COA – Course of Action
CoE – Center of Excellence
COMSEC – Communications Security
CWO – Chief Warrant Officer

DCO – Defense Connect Online
DKMO – Deputy Knowledge Management Officer
DLI – Defense Language Institute
FA – Functional Area
FM – Field Manual
FORSCOM – Forces Command
IJC – ISAF Joint Command
IM – Information Management
IMO – Information Management Officer
ISAF – International Security Assistance Forces
ISM – Information Systems Manager
IT – Information Technology
JAMO – Joint Automation Management Office
JMD – Joint Manning Document
JRTC – Joint Readiness Training Center
KM – Knowledge Management
KMI – Knowledge Management Integrator
KMNet – Knowledge Management Network
KMO – Knowledge Management Officer
KMR – Knowledge Management Representative
KMWG – Knowledge Management Work Group
KS – Kansas
LAN – Local Area Network
LL – Lessons Learned
LTC – Lieutenant Colonel
MAJ - Major
MOSS – Microsoft Office SharePoint Server
MTOE – Modified Table of Organization and Allowances
NTC – National Training Center
OEF – Operation Enduring Freedom
OGA – Other Government Agency
OIC – Officer In Charge
OPORD – Operational Order
OPTEMPO – Operational Tempo
PCSing – Permanent Change of Station
RC(E) - Regional Command (East)
RFI – Request for Information
RIC – Regional Information Center
SOP – Standard Operating Procedure
TRADOC – Training and Doctrine Command
TTPs – Tactics, Techniques, and Procedures
VTC – Video Teleconference
WG – Work Group
XO – Executive Officer